

been newly received, and calculates a calibration parameter on a gravity direction and the average value.

[0324] (14)

[0325] The information processing apparatus according to (1),

[0326] wherein the image rendering processing unit processes a display image on the display unit based on a difference between a head posture obtained from the first information and a trunk posture obtained from the second information.

[0327] (15)

[0328] The information processing apparatus according to any one of (2) and (3),

[0329] wherein the image rendering processing unit generates a free viewpoint image by correcting a world coordinate system in a manner that a difference between a head posture and a trunk posture in the free viewpoint space decreases under a biosafety support mode.

[0330] (16)

[0331] The information processing apparatus according to any one of (2) and (3),

[0332] wherein the image rendering processing unit generates a free viewpoint image by fixing a head posture in a free viewpoint space at a point of time when a biosafety support mode is set and by changing a trunk posture in a free viewpoint space depending on a head posture detected by the head posture detection unit under the biosafety support mode.

[0333] (17)

[0334] The information processing apparatus according to any one of (15) and (16),

[0335] wherein the biosafety support mode is set when a state where a difference between a head posture obtained from the first information and a trunk posture obtained from the second information exceeds a first threshold continues for a certain time, and the biosafety support mode is released when the difference is equal to or less than a second threshold that is less than the first threshold.

[0336] (18)

[0337] An information processing method including:

[0338] a receiving step of receiving first information on a posture of a head of an observer and second information on a posture of a body other than the head of the observer; and

[0339] an image rendering processing step of generating a display image corresponding to a posture of the observer based on the first information and the second information.

[0340] (19)

[0341] A computer program written in a computer readable format to cause a computer to function as:

[0342] a head posture operation unit configured to calculate posture information of a head of an observer based on a result obtained by detection in a head posture detection unit configured to detect a posture of the head of the observer;

[0343] a second posture operation unit configured to calculate posture information of a second part of a body other than the head of the observer based on a result obtained by detection in a second posture detection unit configured to detect a posture of one or more of the second part; and

[0344] an image rendering processing unit configured to process an image to be displayed on a display unit based on

a posture of the head of the observer and a posture of the second part, the display unit being fixed to the head or a face of the observer.

[0345] (20)

[0346] An image processing system including:

[0347] a display unit fixed to a head or a face of an observer;

[0348] a head posture detection unit configured to detect a posture of the head of the observer;

[0349] a second posture detection unit configured to detect a posture of one or more second parts of a body other than the head of the observer; and

[0350] an image rendering processing unit configured to process a display image on the display unit based on a posture of the head of the observer and a posture of each of the second parts.

REFERENCE SIGNS LIST

[0351]	100	image display system
[0352]	200	head motion tracking device
[0353]	201	sensor unit
[0354]	202	posture angle operation unit
[0355]	203	transmitter
[0356]	300	trunk motion tracking device
[0357]	301	sensor unit
[0358]	302	posture angle operation unit
[0359]	303	transmitter
[0360]	400	image rendering device
[0361]	401	receiver
[0362]	402	image rendering processing unit
[0363]	403	transmitter
[0364]	404	image source
[0365]	500	display device
[0366]	501	receiver
[0367]	502	display unit

1. An information processing apparatus comprising:
 - a receiver configured to receive first information on a posture of a head of an observer and second information on a posture of a body other than the head of the observer; and
 - an image rendering processing unit configured to generate a display image corresponding to a posture of the observer based on the first information and the second information.
2. The information processing apparatus according to claim 1,
 - wherein the receiver receives at least a posture of a trunk of the observer as the second information, and
 - the image rendering processing unit generates a free viewpoint image that tracks a posture of the head of the observer by orienting a line-of-sight direction of the observer in a free viewpoint space based on the first information and by orienting an orientation (viewpoint position) of the body of the observer in the free viewpoint space based on a posture of the trunk of the observer obtained from the second information.
3. The information processing apparatus according to claim 2,
 - wherein the image rendering processing unit, when receiving a control signal used to instruct the observer to move in the free viewpoint space as an input, determines a point after movement (viewpoint position) by recognizing, as a front direction, an orientation